

NEW SPECIES OF *HYMENOXYIS* AND *PERITYLE* (COMPOSITAE) FROM UTAH

Stanley L. Welsh¹ and Elizabeth Neese²

ABSTRACT. — Named as new species are *Hymenoxys lapidicola* Welsh & Neese, from Uintah County, Utah, and *Perityle specuicola* Welsh & Neese, from Grand County, Utah.

Revision of the sunflower family, as part of the Utah Flora project, has led to the recognition of several taxa that were previously known but had been placed within other entities. Additionally, some of the taxa had apparently not been collected previously, but were similar to previously described taxa. Careful observation of each of the numerous specimens in the herbarium at Brigham Young University has led to recognition of the great diversity in our flora. The two taxa described below each occur on sandstone, where they grow in crevices. They are part of a cadre of species with crevice habitats, and both are narrowly restricted endemics. Much more work remains to be done in the areas of the state occupied by massive sandstones, limestones, and other geological strata that produce cliffs and escarpments. The following species are named to indicate the peculiarities of their places of growth.

Hymenoxys lapidicola Welsh & Neese, sp. nov. Ab *H. torreyana* (Nutt.) Parker in bracteis recurvatis et capitulis parvioribus differt et a *H. depressa* (T. & G.) Welsh & Reveal in bracteis recurvatis et marginem scariosis differt.

Pulvinate caespitose herbs from a multicapital caudex, this densely clothed with brown marcescent leaf bases, acaulescent; leaves all basal, 0.3–1.2 cm long, 0.8–2 mm wide, narrowly oblanceolate, the inner conspicuously glandular-punctate, the blades glabrous, the axils long-villous; heads solitary, immersed in the leaves; disks 5.5–9 mm wide; involucre 5–8 mm high; bracts distinct, in 2 or 3 subequal series, sparingly villous and suffused reddish, the margins scariosus, the tips more or less squarrose-spreading and some-

what thickened; rays 5 or 6, yellow, 5–6 mm long; pappus scales lance-acuminate, 2.3–3 mm long; achenes 2–2.5 mm long, pilose.

TYPE.— USA. Uintah County, T5S, R25E, S20, Point of Pines camp area, S edge of Blue Mt. Plateau, at 2485 m, in ponderosa pine-manzanita community, sandy loam and sandstone outcrop, 12 June 1982, E. Neese and C. Fullmer 11734 (Holotype BRY; Isotype NY).

Additional specimens: Utah. Uintah County, Blue Mountain, cliff face, 11 June 1982, F. Smith & J. Trent 1653 (BRY); do, Point of Pines campground, Weber Sandstone, 11 June 1982, R. Cass & E. Neese 919 (BRY); do, 10 mi E of Jensen in draw at base of Blue Mountain, 14 May 1982, E. Neese et al. 11370 (BRY).

The habit of *H. lapidicola* simulates that of *H. depressa*, but the features of the involucre bracts and the proportionally broader non-cuspidate leaves indicate a closer relationship with *H. torreyana*. From that entity it differs in the recurved outer involucre bracts with thickened reddish tips and much smaller heads.

Perityle specuicola Welsh & Neese, sp. nov. Similis *Perityle congesta* (Jones) Shinnars sed in aspectis et pappo setarum 3 vel 4 (nec 1 vel 2), et in pappo palearum sigmoidis et expansis differt.

Perennial suffruticose herbs, mainly 50–75 cm tall; stems sprawling or pendulous, much branched; herbage glandular-hispidulous; leaves mostly alternate, short-petiolate, the blades 3–6 mm long, 1.5–3 mm wide, ovate-elliptic, entire, hispidulous; heads few to many in a branching corymbose inflorescence; involucre 3.5–5 mm high, 5–6

¹Life Science Museum and Department of Botany and Range Science, Brigham Young University, Provo, Utah 84602.

²Life Science Museum, Brigham Young University, Provo, Utah 84602.

mm wide; bracts 11-16, oblong to elliptic, keeled; ray flowers lacking; disk flowers numerous, ca 2.5 mm long, whitish (?); pappus of 3 unequal scabrous bristles and often with 1 apically flattened and sigmoid scale; achenes 3-3.8 mm long, the faces flattened, glabrous, the margin thickened and with short ascending hairs.

TYPE.—USA. Utah. Grand County, T25S, R21E, S24, 2 mi due N of Moab, 1220 m, hanging garden community, 29 Sept. 1977, S.L. Welsh 16283 (Holotype BRY; 6 isotypes distributed previously as *Laphamia congesta* Jones).

Additional specimens: T25S, R22E, S29, Castle Valley, 2 mi due NNE of Moab, Negro

Bill Canyon, 1220 m, Navajo sst, hanging garden community, 6 Oct. 1977, S.L. Welsh 16365 (BRY).

The technical features of this taxon indicate an affinity with *P. congesta*, but the differences in the pappus features, inter alia, suggest the need for recognition of this distinctive plant. It seems to be more than an etiolated shade form of its near ally, from which it is remote geographically by more than 300 km.

LITERATURE CITED

- POWELL, A. M. 1973. Taxonomy of Perityle section *Laphamia* (Compositae-Helenieae-Peritylinae). *Sida* 5:61-128.